

REMARKS

Claims 1-9 and 11-12 are all the claims pending in the application.

Claim 10 has been canceled and claim 11 has been amended to depend from claim 2 instead of canceled claim 10. In addition, the dependency of claim 12 has been amended to exclude claim 10.

Entry of the above amendments is respectfully requested.

Initially, the Examiner is respectfully requested to return a signed and initialed copy of the Form PTO/SB/A & B (modified) filed with Applicants' IDS on January 18, 2007.

In addition, the Examiner is respectfully requested to indicate that the drawings submitted on July 14, 2004 have been accepted.

I. Objection

The Examiner indicates that claim 10 will be objected to under 37 C.F.R. § 1.75 as a substantial duplicate of claim 2, if claim 2 is found to be allowable.

As noted above, claim 10 has been canceled, thereby obviating the objection.

Accordingly, withdrawal of the objection is respectfully requested.

II. Response to Rejection of claims 1-12 under 35 U.S.C. § 103(a)

Claims 1-12 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yoshimura et al. (US 5,854,868) in view of Fujii et al. (US 6,300,037).

The rejection is respectfully traversed.

Claim 1 recites a process of manufacturing an optical waveguide for optically connecting a plurality of optical devices, comprising the steps of: disposing a resin composition between two or more optical devices, the resin composition comprising a resin and a 1,4-dihydropyridine

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derivative, forming an optical path through the resin composition between the optical devices by light having a wavelength capable of inducing a structural change in the 1,4-dihydropyridine derivative, and removing the 1,4-dihydropyridine derivative from the resulting resin composition.

Yoshimura is cited as teaching a process for integrating optical devices and optical waveguides. The Examiner acknowledges that Yoshimura does not disclose that the photopolymer contains a 1,4-dihydropyridine derivative, as recited in claim 1. To make up for the deficiencies of Yoshimura, Fujii is cited as teaching a photosensitive polyimide resin, which contains a 1,4-dihydropyridine derivative. The Examiner asserts that it would have been obvious to one having ordinary skill in the art to modify the method of Yoshimura to include a resin composition comprising a resin and 1,4-dihydropyridine.

Applicants respectfully disagree and submit that a *prima facie* case of obviousness has not been established.

The Examiner bears the burden of presenting a *prima facie* case for obviousness, with a showing of such *prima facie* obviousness requiring: 1) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; 2) the teaching or suggestion of all the claim limitations of Applicants' Invention in the combined prior art references; and 3) a reasonable expectation of success. MPEP § 2143. Accordingly, the Examiner must present a convincing line of reasoning as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references.

The Examiner has not done so in this case. The Examiner has simply made a statement that it would have been obvious to modify the method of Yoshimura to include a resin composition comprising a resin and 1,4-dihydropyridine and does not present a line of reasoning as to why one of ordinary skill in the art would have been motivated to modify Yoshimura or to combine the references.

In addition, claim 1 recites that the 1,4-dihydropyridine derivative is removed from the resin material. Fujii discloses that a photosensitizer is added to a solution of a polyamic acid to obtain a solution of a photosensitive polyimide resin precursor, which is applied to a foil and exposed with light through a photomask. The unexposed areas of the film are removed to obtain a negative pattern consisting of the polyimide resin precursor. *See e.g.*, col. 6, lines 34-51. Thus, Fujii does not disclose the removal of the photosensitizer (i.e., a 1,4-dihydropyridine derivative) from the resin material. Further, Yoshimura does not disclose the removal of the photosensitive substance provided in the space between waveguides or between waveguides and fibers.

Therefore, even if Yoshimura and Fujii were somehow combined, the references do not teach or suggest all of the elements of claim 1.

For at least the above reasons, it is respectfully submitted that a *prima facie* case of obviousness has not been established.

Accordingly, withdrawal of the rejection is respectfully requested.

III. Conclusion

In view of the above, reconsideration and allowance of claims 1-9 and 11-12 is respectfully requested.

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If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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